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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,192	07/24/2003	Donald P. Wahlstrom	CING-0642/798.US	2691

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EXAMINER	
ZEWDU, MELESS NMN	
ART UNIT	**PAPER NUMBER**
2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/627,192	WAHLSTROM ET AL.	
	Examiner	Art Unit	
	Meless N. Zewdu	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 and 8-28 is/are rejected.

7)☒ Claim(s) 7 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 24 July 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is the first on the merit of the instant application.

2. Claims 1-28 are pending in this action.

Claim Objections

Claims 8 objected to because of the following informalities: the remote unit, which has been introduced in the independent claims is referred to as, "a remote unit" in the dependent claims (e.g., see claims 8, 11, 12, 19 and 20). The appropriate reference would have **the remote unit**. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 106 and 8-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gormley (US 6,967,937 B1) in view of Meiyappan (US 6,751,444 B1)..

As per claim 24: Gormley discloses an apparatus for access requests from a plurality of

remote units (see fig. 1; abstract)comprising:

means for receiving an access request from at least two remote units, wherein the access request is a request for uplink access (see col. 4, lines 41-58), wherein the access request is included within two or more tones (see col. 4, lines 20-27; col. 8, lines 7-13; col. 6, lines 7-16);

means for transmitting an indication of at least one remote unit that is allowed to transmit (see col. 8, lines 14-31). But, Gormley does not explicitly teach about priority request and means for analyzing the priority requests received from the remote units to determine which remote units will be granted uplink access to the network, and further means for prioritizing the access requests, as claimed by applicant. However, in the same field of endeavor, Meiyappan teaches about a method and apparatus for adaptive carrier allocation and power control in multi-carrier communication system, wherein a channel allocator (means) decides the spectral priority based on the information gathered from the access requests (hence priority request is analyzed) sent by subscriber units (see col. 7, lines 23-38; col. 8, lines 26-65). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Gormley with that of Meiyappan so enable users to use certain power control range based on their priority and carrier allocation (see col. 8, line 60-col. 9, line 9).

As per claim 15: the features of claim 15 are similar to the features of claim 24, except claim 15 is a method including the steps the apparatus of claim 24 is expected to follow in order to perform its intended function, and further includes a difference feature of

monitoring if the remote unit of claim 24 is authorized, which is taught by Gormley (see col. 7, lines 16-22; col. 8, lines 14-31). Hence, since the method steps of claim 15 are required by the apparatus of claim 24, claim 15 is rejected on the same ground and motivation as claim 24.

As per claim 16: Gormley teaches a method wherein the access reuest includes two OFDM tones (see col. 9, lines 35-55).

As per claim 18: Gormley teaches a method wherein the access request includes three or more OFDM tones that convey the access and priority requests (see col. 9, lines 35-55).

As per claim 19: Gormley teaches a method wherein remote unit is a user device, the user device being coupled to another device that includes a wireless transceiver for communicating wirelessly with the base (see fig. 1; col. 5, lines 29-67).

As per claim 20: Gormley teaches a method wherein remote unit is a facsimile machine, the facsimile machine being coupled to another device that includes a wireless transceiver for communicating wirelessly with the base (see col. 1, lines 31-40).

As per claim 21: Gormley teaches a method further comprising:

at the remote unit, receiving an indication of a request for a transmission from one or more user devices, wherein the access request to the base is determined at least partially by the request received from the one or more user devices (see col. abstract; col. 4, lines 3-27; col. 8, lines 14-31).

As per claim 22: the features of claim 22 are similar to the features of claim 21, except accessing a lookup table to determine a level of priority for each of the one or more user devices, which is taught by Meiyappan (see col. 8, lines 14-25; col. 9, lines 18-37).

As per claim 23: claim 23 is directed to a computer readable medium intended to enable the apparatus of claim 24 perform its intended function. Hence, since the computer-readable medium of claim 23 is required so as to enable the apparatus of claim 24, claim 23 is rejected on the same ground and motivation as claim 24.

As per claim 25: the features of claim 25 are similar to the features of claim 23, except "a collision-free multiple access protocol", which is taught by Gormley (see abstract). Hence, claim 25 is rejected on the same ground and motivation as claim 23.

As per claim 26: the feature of claim 26 is similar to the feature provided in claim 15 (authorization). Hence, claim 26 is rejected on the same ground and motivation as claim 15.

As per claim 27: the feature of claim 26 is similar to the feature of claim 16. Hence, claim 26 is rejected on the same ground and motivation as claim 16.

As per claim 28: the feature of claim 28 is similar to the feature of claim 18. Hence, claim 28 is rejected on the same ground and motivation as claim 18.

As per claim 3: the features of claim 3 are similar to the features of claim 24, except claim 3 recites that prioritization is to one of two remote units. But, the prior art (Gormely) prioritizes for a plurality or remote units which include the two required by claim 3. Hence, claim 3 is rejected on the same ground and motivation as claim 24.

As per claim 4: the feature of claim 4 is similar to the feature of claim 16. Hence, claim 4 is rejected on the same ground and motivation as claim 16.

As per claim 5: the feature of claim 5 is similar to the features of claims 16 and 24. Hence, claim 5 is rejected on the same ground and motivation as claims 16 and 24.

As per claim 6: the feature of claim 6 is similar to the feature of claim 18. Hence, claim 6 is rejected on the same ground and motivation as claim 18.

As per claim 7: Gormley teaches a method wherein four tones encompasses the access request and priority request (see col. 6, lines 17-35; col. 9, lines 35-55). Multiple tones include four.

As per claim 8: Meiyappan teaches a method wherein the priority request is based on the type of remote unit (see col. 8, lines 14-46; col. 9, lines 17-37). The unique ID of a device can identify the type of device.

As per claim 9: Meiyappan teaches a method wherein the priority is based on a user device associated with the remote unit (see fig. 1; col. 8, lines 26-38).

As per claim 10: Meiyappan teaches a method wherein the priority is based on a type of application to which the transmitted information is related (see col. 8, lines 26-38). A user's information can include any user information.

As per claim 11: Meiyappan teaches a method wherein the priority request is based on a level of service associated with the user (see col. 8, lines 26-38). A user information can include a service level if the user has subscribed one.

As per claim 12: Gormley teaches a method wherein the base and remote units communicate via a collision-free multiple access protocol (see col. 7, lines 22-30).

As per claim 13: Meiyappan teaches a method further comprising creating queues for each level priority (see col. 8, lines 14-59; col. 9, lines 18-37). A priority table is same as priority queues.

As per claim 14: Meiyappan teaches a method wherein the highest priority access requests are placed ahead of all other lower priority access requests in priority queues (see col. 8, lines 14-59; col. 9, lines 18-37). Placing high priority requests ahead of all other lower priority access requests must be obvious from priority table of the cited prior art.

As per claim 1: while similar features of claim 1 are rejected on the same ground and motivation as claim 24, regarding the difference limitations, Gormley teaches:

a radio transceiver for communication with a base (see fig. 1);

a memory module, wherein the memory module includes an indication of a combination of two or more tones (see col. 7, lines 10-30, lines 38-63; col. 6, lines 7-35; table 2);

a stationary base station of a fixed wireless network (see fig. 1), the base comprising:

a wireless transceiver for communicating with a public switched telephone network and the internet (see col. 5, lines 43-55);

a radio transceiver for communicating with one or more remote units (see fig. 1);

a memory module and a processor (see abstract; col. 5, lines 22-55; col. 5, line 63-col. 6, line 35). Note: memory and processor are not disclosed word for word,

nonetheless, should be obvious from the capability of the base station in Gormley's reference.

As per claim 2: the apparatus of claim 1 wherein indications of an access request and a priority request are combined in two OFDM tones (see abstract; col. 7, lines 10-30, lines 47-64), wherein further the base and remote units communicate via a collision-free multiple access protocol (see col. 7, lines 23-30), and wherein further both the remote units and the base include a data medium access control layer for use in transmission (see col. 1, line 19-col. 2, line 17).

Allowable Subject Matter

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Banks-Harold Marsha can be reached on (571) 272-7905. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Meless Zewdu

Examiner

19 December 2006.